The Use of Equity Funding to Improve Outcomes

Report to the
Department of Education and Early Childhood Development

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Executive summary

This project was undertaken with the Department of Education & Early Childhood Development (DEECD) to examine the use of equity funding by schools. The findings of the study are based on the literature review and data analysis undertaken by DEECD, and discussions in all regions, a series of case studies and an online survey of schools receiving equity funding. The focus of this report is the investigation of how schools use equity funding and how this has contributed to improving outcomes for students from disadvantaged backgrounds.

About half of all government schools receive equity funding, based (very largely) on the measure of Student Family Occupation (SFO) density. Schools with SFO just over the median level receive only minimal funds but those at very high SFO receive equity funding that can approach 15 per cent of the school’s total budget.

A number of observations are made prior to reporting the findings of the study:

− All schools have some students in need of special support for their learning but there are proportionately many more in the schools with very high SFO density and the concentration of students from low socio-economic background increases the need for support.

− Equity funds need to be viewed in conjunction with the wider forms of school improvement implemented under the Blueprint for Government Schools (DE&T 2003).

− Research, especially in the United States of America (USA), has shown that it is very difficult to establish a relationship between changes in expenditure and test results especially in the short term.

− Research indicates school programs for equity need to be directed not just at one but at a range of activities related to staff capacity, program structure and content, student-to-program relationships, student-to-teacher relationships, and relationships with family and the community.

− Enhanced early childhood development including non-cognitive development is important for later life chances as well as for improved test scores.

Key findings

The decision is frequently made to treat the school’s equity allocation as part of the general operating budget. This can make it very difficult to determine which equity strategies are more effective, and which are less effective. The mix of funds is frequently used to support a range of strategies and initiatives that might have a positive outcome for the equity target group. Analysis of data on well-performed schools with high SFO density matched with their responses to the online survey indicates that these schools use a wide range of the staffing, program and relationship strategies identified in the literature review.

The Schools Accountability Framework focuses on performance rather than reporting on the specific expenditure of funding inputs. However, it will be necessary to establish a nexus between
the weighting given to particular strategies within schools and the outcomes subsequently achieved if firm conclusions about effective practice are to be drawn. It may be valuable to review the effectiveness of the use in some regions of the development of school Annual Implementation Plan as a means of eliciting how schools are using equity funding, with a view to widening this approach.

Analysis of the data on schools receiving equity funding in 2006 did not show any state-wide relationship between changes in funding between the years 2004 to 2006 and Curriculum and Standards Framework outcomes for individual schools in 2006. Most analyses of funding and student test scores in other countries and a recent study in New South Wales (NSW) have failed to show a relationship, so the finding for Victoria is not surprising especially for such a short period. In itself this does not mean that the additional money for equity was not used effectively. Closer analysis of schools with high SFO that had results above expectation showed that some had improved performance on a number of indicators, not just test scores. The large majority of the schools that completed the survey indicated they believed that the equity funds had enabled them to make improvements to their programs and to student outcomes.

Schools that are performing well engage in a number of equity strategies, including activities related to staff capacity, program structure and content, student-to-program relationships, student-to-teacher relationships, and relationships with family and the community. The findings below relate to some specific areas but it needs to be remembered that it is the coherence of the whole that appears to be associated with good performance.

Schools frequently use equity funding to reduce student: teacher ratios. This is one of the most common strategies identified through this study. The evidence for the effectiveness of this strategy is mixed, since the circumstances in which the strategy is implemented vary widely.

Research in America reviewed by Gustafsson (2003) suggests that there are benefits of reduced class sizes for disadvantaged students in the first few years of schooling. The impact weakens as they progress through school, and there is no evidence for any positive effect after Year 9. However, principals at case study schools with high concentrations of disadvantaged students maintain that improved class sizes and the use of additional teachers continue to be an important pre-condition for learning for these students into the early years of secondary school.

Lower class size are a feature of both well performed schools with high SFO, and less well performed schools with high SFO, so smaller class sizes are unlikely to be sufficient to improve student outcomes in and of themselves.

Schools report using equity funds to support multiple strategies across areas including development of teacher competence, additional literacy and numeracy provision, student engagement, attendance, and welfare strategies. The importance of teacher competence, as well as program breadth and welfare related strategies need to be more closely examined to determine how these factors interact in well performed schools with high SFO density.
In contrast to these reports on the effective use of additional teachers for equity programs was the indication in a number of schools, especially schools with very experienced and relatively costly staff, that equity funds on occasion could be absorbed in solving a budget problem.

At the other extreme are the schools with young inexperienced staff and a high rate of teacher turnover. Lamb and Teese (2005) in their review of equity programs in NSW saw this as a crucial issue in understanding the performance of schools with disadvantaged students. Most of the equity strategies undertaken by schools are dependent on the retention of competent teachers who effectively engage with students and parents. Further analysis of the links between staff age, turnover and student performance could be considered.

Teacher competence is the single most important variable in student performance (Gustafsson 2003). Careful staff selection, deployment and retention can have a significant impact on school outcomes. Principals potentially play an important role in determining the quality of their schools by the selection of teachers, and proactive examples of strategic staff selection and use in well performed schools with high SFO density support the findings of the literature in this regard, as well as being supported in a number of the case study schools. The use of teacher expertise to both provide direct additional teaching expertise to meet the academic needs of disadvantaged students and to coach and support other teaching staff is an important indicator of an effective equity strategy. The review of the Student Resource Package (SRP) by Lamb and others found that high performing schools tend to allocate a considerable proportion of experienced competent teachers to the early years of primary and secondary schooling.

Schools with particularly high SFO density indicate that they operate in environments in which individual student disadvantage is compounded by the concentration of students from similar backgrounds within the school. The research evidence on concentrated disadvantage supports this view. This creates an environment in which the majority of the students have learning and relationship issues. In such schools, equity strategies tend to become a core of the school’s program, rather than a specific initiative for a disadvantaged cohort within the school. Such strategies support both cognitive and also non-cognitive development or emotional intelligence which has been seen to be important for later life chances.

As a result equity funding becomes a means of supporting a range of welfare, extra-curricular and behaviour management approaches, in addition to attempting to directly improve academic performance through a strong focus on literacy and numeracy interventions. These schools often find it difficult to target literacy and numeracy assistance to particular students when so many in the cohort require such support. The amount of funds needed to support such work is considerable.

There is a strong case for extended professional development programs to help increase the effective use of equity funding providing schools with exposure to examples of good practice. While each school faces particular circumstances, the literature review and survey responses from well-performed schools outline a general good practice framework. There is a need for a continuing professional development program to focus on specific examples of effective use of equity funding. Such a support strategy should be developed at a statewide level rather than as a
cluster-based or region-based strategy in order to overcome potential competitiveness among adjacent schools, with sufficient resources to overcome constraints at a regional level.

As mentioned, research shows that outcomes for disadvantaged students are related to staff capacity, program structure and content, student-to-program relationships, student-to-teacher relationships, and relationships with family and the community. Developments in these areas have been fostered in the various activities launched by the Blueprint which encompassed for all schools, not only those with equity funding, developments related to student learning, leadership and governance, including selection, mentoring and development for principals, promoting a performance and development culture in schools, induction, mentoring and teacher development, and data on performance and reviews to aid school improvement. The information on the website already advises schools to relate their activities to the effective schools model.

There were a number of issues in the research literature which only received limited attention from schools surveyed or in the case studies undertaken. The importance of intervention to support early childhood development among disadvantaged children has received strong endorsement by Council of Australian Governments (COAG) (2006) and is supported by the research by Heckman (2006). It is suggested that links to early childhood development processes be further investigated and ways in which they might be included in school strategies for equity be considered, especially those relating to school, parent and community relationships.

It was not clear that all schools were gathering all relevant data or making the best use of data in preparing their programs. An indication of this was the relatively low percentage of schools that were using the Managed Individual Pathways (MIPs) tool. It is suggested that examples might be prepared for schools regarding the range of ways high performing schools collect and use data in the formulation and evaluation of their equity strategies.

This project has reported on schools with very good outcomes which are pursuing equity strategies on a broad front associated with improved learning for disadvantaged students. Key features of these schools were:

1. **Leadership and the use of data:** strong school leadership and a culture in which there is a strong emphasis on the use of data to monitor and drive performance, and to direct efforts.

2. **Access to external support and expertise:** schools have access to external support and expertise to help develop responses to the needs of students and to opportunities to learn from others’ experiences, such as through conferences and seminars. Principals from several well performed schools with high SFOs made particular mention of the 2005 Equity Conference which they indicated had been valuable in developing their equity strategies.

3. **Partnerships:** the capacity to form partnerships with the community and external agencies to leverage support for providing attractive alternative learning experiences.

The project also reported examples of specific strategies in particular areas. The table at the end of this summary provides examples of schools with overall high performance and some with specific strategies that appeared to be very effective. Further cases are contained in the supporting papers prepared for this project. It is suggested that it would be useful to prepare examples of good practice both of overall programs and of specific activities for review by regions and
selected schools which could be used as part of a package of information for a conference on equity strategies, with presentations by the relevant schools.

This report notes that more equity funds are currently committed to secondary students than to primary students. It is suggested that the allocation of equity funds to the early years of primary schools be reviewed in the light of the issues raised in this report.

The syntheses of research undertaken by the OECD indicate that the activities being pursued in Victoria are in line with best practice. However, the OECD also notes a number of system level factors in the overall structure of schooling that affect equity outcomes that are not considered in this project. The provision and support for equity in schools in Victoria could be reviewed against the OECD (2007) No More Failures: Ten Steps to Equity.

Examples of good practice suggested for conference presentation

<table>
<thead>
<tr>
<th>Overall program with high performance</th>
<th>School 1</th>
<th>Very broad based approach to equity strategies encompassing literacy &amp; numeracy, welfare support, retention and attendance, careers pathways and transition support, teacher practice and professional development, and curriculum development.</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>School 2</td>
<td>Major focus is on use of equity funds to support curriculum programs. Smaller class sizes used to provide more attention to literacy and numeracy and implementing individual learning plans.</td>
</tr>
<tr>
<td></td>
<td>School 3</td>
<td>Strong focus on literacy and numeracy strategies, and on student academic performance. The main focus is on employing staff to keep student:teacher ratios low and classes small.</td>
</tr>
<tr>
<td>Staff capacity</td>
<td>School 4</td>
<td>Staff recruitment and induction: The principal recruits teaching graduates directly from university campuses, having identified potential candidates through contact with the school experience coordinator on campus. Potential recruits are assessed against the criteria of: innovativeness, adaptability, high IT skills, and a sense of social justice. A two week full induction is provided to each new teacher which includes a focus on the role and development of individual learning plans.</td>
</tr>
<tr>
<td>Program depth and student engagement</td>
<td>School 5</td>
<td><strong>Kids at Play program</strong>: A major curriculum approach adopted focuses on changing the culture of interaction between teachers and students, as well as the students’ relationship with the curriculum. The curriculum is centred on relationship building that operates across all year levels within the school. The approach provides students with regular play sessions in which they could explore and investigate experiences that can assist in developing skills in story writing as well as general communication skills.</td>
</tr>
<tr>
<td></td>
<td>School 6</td>
<td><strong>Hands on Learning Program</strong>: it consists of four groups of ten students from years 7-10, withdrawn from classes for one day per week, to work on practical construction projects around the school with a teacher and an artisan. Participation is voluntary and students in need of greater support may spend two or even more days. Reengagement rates are high, retention rates high and program attendance rates similarly high, attendance rates high in students’ mainstream classes during the days they are not in Hands On. The teams share resources with Hands On teams at other schools, and visits between these different groups are encouraged.</td>
</tr>
<tr>
<td></td>
<td>School 7</td>
<td><strong>Extended hours on literacy and numeracy with small groups</strong>: Most of the schools program is based on literacy and numeracy using what they call a tool box which is a metaphor for a folio or wallet on student progress which has progress point and student needs identified. They have a range of student assessments in addition to AIM results. Students work on the tool box program 9-10.30am and 11-1.30am, with a small time for physical education. The school does not use Reading Recovery as it would not allow them to deal with enough of the students who need assistance.</td>
</tr>
</tbody>
</table>
Parent and community interaction

School 8

**Particular use of welfare support in conjunction with ACE centre:** The school is trying to lift aspirations. Community relations is a major role for the welfare coordinator who also organises recognition of the learning of volunteers through the ACE centre. The school uses its new kitchen facility (in conjunction with a garden) for coffee making and food handling course for parents. It has a Community Link program with Rotary. It brings in volunteers including former students, and school students and parent volunteers regularly visit two nursing homes. The school has a Koorie parent group stimulated by a Koorie parent and has found work placements for some Koorie parents.
1 Introduction and context

Equity funds are provided to improve the outcomes for students whose readiness to learn has been affected by a variety of circumstances. In particular, funding might be used to:

− improve their literacy and numeracy achievement
− improve their learning skills including their skills in monitoring and managing their own learning
− increase their level of engagement, participation and retention
− raise the expectations of students, teachers and parents in relation to the learning outcomes of these students
− enhance partnerships between schools and families.

Under the SRP introduced in 2005 considerable changes were made to equity funding for government schools. Allen Consulting (2007) noted that this meant:

− an increase in the total amount of equity funding by nearly 50 per cent; and
− targeted allocation to a smaller number of schools, available to around half of all schools.

The elements of equity funding considered and the funds allocated in 2006 for each were:

− Student Family Occupation (Prep-12)—$ 40 million
− Middle Years Equity (Years 5-9)—$9 million
− Secondary Equity (Years 7-9)—$28 million
− Mobility—$2 million

The total expenditure was about $80 million which is equal to about 2 per cent of the total government budget for government schools.

Half of all schools, 824, received funding compared with 1013 in 2004. Average funding per school was just under $100,000 compared with a little over $50,000 in 2004. Most additional funding received was in amounts of up to $20,000, though some schools with high SFO received considerably greater sums.

Schools in 2007 were eligible for SFO based funding if their SFO density exceeded the state-wide median of 0.4731. Middle years funding was provided where the SFO density was at or above the statewide 80th percentile of 0.6194. For Secondary Equity, schools had to have SFO density greater than 0.5048; or Year 7 AIM results for English in the 15 per cent lowest average scores; or, Year 7 AIM results for Maths in the 15 per cent lowest average scores; or, where the proportion of students not attaining at least beginning level CSF Level 5 English in Year 8 is in 15 per cent highest; or the proportion of students not attaining at least beginning level CSF Level 5 Maths in Year 8 is in the 15 per cent highest.
Table 1 summarises the distribution of funds. In 2006 the average equity funding per student in schools receiving the funds was $215 in primary schools and $388 in secondary schools. The average funding per capita in schools where the SFO density was 0.7 or higher was $532 in primary and $853 in secondary. Schools with SFO density of 0.7 and over make up nearly 20 per cent of primary schools receiving equity funds (about 10 per cent of all primary schools) and receive a little under 50 per cent of the primary equity funds; they make up 14 per cent of secondary schools receiving equity funds and receive about 30 per cent of secondary equity funds. The equity funds received by schools with SFO density 0.7 or higher make up 7 per cent or more of the school total budget. A few schools receive up to 15 per cent of their budget in equity funds.

**Table 1. Distribution of equity funding by school level and SFO density 2006**

<table>
<thead>
<tr>
<th>SFO density</th>
<th>Enrolments</th>
<th>Total equity Funds</th>
<th>Equity per capita</th>
</tr>
</thead>
<tbody>
<tr>
<td>Language schools</td>
<td>all eligible</td>
<td>1,164</td>
<td>$113,503</td>
</tr>
<tr>
<td>Prim/Sec (P-12)</td>
<td>all eligible</td>
<td>16,070</td>
<td>$5,048,712</td>
</tr>
<tr>
<td>Primary</td>
<td>less than 0.7</td>
<td>107,295</td>
<td>$14,819,496</td>
</tr>
<tr>
<td>Primary</td>
<td>0.7 and over</td>
<td>25,944</td>
<td>$13,805,258</td>
</tr>
<tr>
<td>All Primary</td>
<td>all eligible</td>
<td>133,239</td>
<td>$28,624,754</td>
</tr>
<tr>
<td>Secondary</td>
<td>less than 0.7</td>
<td>101,878</td>
<td>$31,890,142</td>
</tr>
<tr>
<td>Secondary</td>
<td>0.7 and over</td>
<td>16,505</td>
<td>$14,084,444</td>
</tr>
<tr>
<td>All Secondary</td>
<td>all eligible</td>
<td>118,383</td>
<td>$45,974,587</td>
</tr>
<tr>
<td>All schools receiving equity funds</td>
<td></td>
<td>268,856</td>
<td>$79,761,556</td>
</tr>
</tbody>
</table>

Several key questions were identified in the study undertaken by Allen Consulting (2007):

− what strategies are schools using to pursue more equitable outcomes? how do they differ for schools in different circumstances? how have they changed over time?

− how do schools allocate their budgets to these activities (and others)?

− what is the role of SRP equity funding in supporting these strategies? what would schools stop doing if they no longer received SRP equity funding?

− what are the student outcomes being achieved? what does the distribution of outcomes look like? what outcomes are being achieved by the various equity groups?

− how have the outcomes changed over time, including as funding arrangements have changed?

− which have been the most successful strategies to achieve more equitable outcomes? in what circumstances?

− what has driven the biggest changes?

− what is the range of approaches that make up ‘best practice’? how have schools achieved ‘best practice’? what have been the levers for change?
what has supported or hindered good practice?
what has been the impact of SRP equity funding?

1.1 Methodology and report

The project had six stages. Stages 1 and 2 were undertaken by DEECD. Stages 3 to 6 were undertaken by the consultant. The stages were:

- Stage 1—literature review; a desktop review focused on what appears to be best practice in schools with students from disadvantaged backgrounds; and the effect that implementing best practice can have on student outcomes.
- Stage 2—analysis of centrally-held data; to establish a comprehensive view of current student outcomes and how they have changed over time together with background data for subsequent stages of the project.
- Stage 3—discussions with regional offices; to inform the development of the questionnaire and identify schools suitable for case study.
- Stage 4—survey of schools receiving equity funds.
- Stage 5—case studies of a selected sample of schools spanning a range of experience with equity programs.
- Stage 6—analysis of the information gathered and development of project report.

The report on the project aimed to:

- identify successful strategies for improving outcomes for students from disadvantaged backgrounds
- outline a quality assurance process to document, promote and support implementation of the most effective strategies across the system
- make recommendations about what the most useful next steps would be, which may include:
  - dissemination of the results of the project, within central office, regional offices and to schools
  - the development of more targeted, practical supports for schools and regional offices to support equitable outcomes, and
  - investigation of related issues, including the desirability of changes in policy and/or practice in some areas.

The consultants were asked to extend the work they undertook to collect some information relating to MIPs and the survey was extended to ensure the coverage of all MIPs schools (most of which were already covered as they received equity funds). There is detail relating to this in the in the supporting paper on the survey.
1.2 Equity funds in context

Four issues are considered that bear on how the information in this project on equity funds is interpreted:

i. equity funds are just one of the programs arising under the Blueprint, the others will also affect performance

ii. meta analyses by the OECD indicate that it is the combination of a number of approaches to equity that appear to have the most effect on outcomes

iii. researchers have found it difficult to establish relationships between performance and programs and funding, and

iv. early childhood development, including non-cognitive development, is an area of great significance in influencing positive outcomes, and it is an area outside of the scope of this current research.

i. Complementary programs and the Blueprint

Allen Consulting (2007) noted that equity funds need to be considered against the various initiatives. This is especially in the context of the Blueprint (DE&T 2003) which recognised the continuation of the principle of self-management, but with increased scope for cooperation with other schools. It recognised the importance of innovation in delivering improved results and of designing, implementing and evaluating programs to meet student needs and the centrality of the quality of the teaching–learning relationship. It also stressed the Government’s determination to improve the quality and performance of schools, and to work with schools that have poor student outcomes (DE&T 2003 p.3). As well as foreshadowing the increased and more targeted equity funds, the Blueprint developed activities for all schools relating to:

− student learning, including the development of the essential learning standards and, slightly earlier VCAL, which allow greater response to diverse student needs
− leadership and governance, including selection, mentoring and development for principals
− promoting a performance and development culture in schools
− induction, mentoring and teacher development
− better data on performance and reviews to aid school improvement, and
− the Leading Schools Fund to support whole school improvement.

In 2007, the focus of Innovation and Excellence grants, a targeted initiative supporting student learning, has been shifted to more directly support the teacher in the classroom, ‘because the research evidence shows that teacher capacity has the most direct impact on improving student achievement’ (C2204-2007).
Schools are affected by their own policies, by interaction and support with other schools and by particular activities supported by regions. The performance of schools receiving equity funding is affected by a combination of programs and approaches, many developed under the Blueprint, not solely through the equity funding being considered in this research.

ii. OECD analyses

As this project was underway, the OECD (2007) released the report, *No More Failures: Ten Steps to Equity*. The ten steps are listed in Box 1. For this project the key items of relevance from the OECD report are those on practices. That is: identify and help those left behind; strengthen home-school links for the disadvantaged; and, respond to diversity and provide for inclusion of minorities.

The items on design and resourcing identified in the OECD report require system level responses, which is also important to consider when addressing equity issues, though they are beyond the scope of this project.

Box 1: Ten Steps to Equity, OECD (2007)

<table>
<thead>
<tr>
<th>Design</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Limit early tracking and streaming and postpone academic selection.</td>
</tr>
<tr>
<td>2. Manage school choice so as to contain the risks to equity.</td>
</tr>
<tr>
<td>3. In upper secondary education, provide attractive alternatives, remove dead ends and prevent dropout.</td>
</tr>
<tr>
<td>4. Offer second chances to gain from education.</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Practices</th>
</tr>
</thead>
<tbody>
<tr>
<td>5. Identify and provide systematic help to those who fall behind at school and reduce year repetition.</td>
</tr>
<tr>
<td>6. Strengthen the links between school and home to help disadvantaged parents help their children to learn.</td>
</tr>
<tr>
<td>7. Respond to diversity and provide for the successful inclusion of migrants and minorities within mainstream education.</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Resourcing</th>
</tr>
</thead>
<tbody>
<tr>
<td>8. Provide strong education for all, giving priority to early childhood provision and basic schooling.</td>
</tr>
<tr>
<td>9. Direct resources to the students with the greatest needs, so that poorer communities have at least the same level of provision as those better-off and schools in difficulty are supported.</td>
</tr>
<tr>
<td>10. Set concrete targets for more equity, particularly related to low school attainment and dropouts.</td>
</tr>
</tbody>
</table>

Earlier OECD research, including *What Makes Systems Perform* (2004), underpins much of this. *What Makes Systems Perform* was a study of six countries that had good quality results on the
Programme for International Student Assessment (PISA) tests, though with varying degrees of equity: Canada, England, Finland, France, Netherlands and Sweden. The more successful countries placed social and cultural disparities at the centre of innovation strategies including assessing and supporting the performance of individual students. Good PISA results were related to a shift to devolved school governance within a context of reforms in system evaluation and monitoring. Success was related to support for teachers and schools in the context of an integrated rather than a differentiated school structure.

**iii. Analysing expenditure**

Rigorous analysis of the relationship between educational expenditure and student performance has been undertaken especially in the US over a prolonged period. These are reviewed by the leading proponent Hanushek (2006). He notes that class sizes have fallen, qualifications of teachers have risen, and expenditures have increased but that little evidence exists to show significant changes in student outcomes.

The difficulty of establishing a direct connection between resources and outcomes even with large data bases over time is relevant to the current study where the effects of additional funding over a very short period are being considered.

Lamb and Teese (2005) made a detailed analysis of the Priority Schools Funding Program (PSFP) in NSW. The PSFP is concentrated on 21 per cent of schools in NSW (576 schools in 2005) and funding approaching $50 million. This can be roughly compared with Victoria’s program covering 50 per cent of schools (824 schools) and expenditure of $80 million in 2006. Lamb and Teese (2005 p.52) found that ‘there is a lack of evidence to suggest that funding for PSFP schools reduces or improves the performance of PSFP schools relative to non-PSFP schools’¹.

However, Lamb and Teese (2005) did find some benefits arising from an additional trial program in NSW, the Priority Action Schools Program (PASP), which involved an additional $15 million a year for several years for action research in a subset of 74 disadvantaged schools. The more positive finding in this case may point to the need to specify more fully the ways in which additional funds are to be used.

It is important also to note the review of a broad range of evidence by Gustafsson (2003). Based on recent meta-analytic integrations of the estimates from different studies he concludes there are positive effects to channelling resources toward:

i. small class sizes for early years of primary schools especially for disadvantaged students, and

ii. teacher competence.

The most telling evidence on class sizes came from the STAR experiment in the US where

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¹ Eligible schools in NSW are funded at the same rate whereas in Victoria the amount rises with the SFO, the measure of need.
students were randomly assigned to small classes of 13-17, to regular classes of 22-26 and to regular classes with an assistant. Gustafsson reviewed why smaller classes may be effective for disadvantaged students, including less disruption of the classroom, but concluded the best explanation was the more effective socialisation to the school environment in smaller classes.

The impact of smaller class size on learning outcomes has been found to be strongest for Year 1, remain relatively constant over Years 2 and 3, while from Year 4 onwards, any positive effect has been found to be relatively weak. As students progress through school, the impact of smaller class sizes weaken, and from Year 9 onwards, there is no evidence that class size has an impact on achievement (Gustafson 2003).

The positive effect of improved class sizes on reading and numeracy achievement for minority students is reported to be three times as great as for non-minority students. Having attended a small class in the early years of schooling has a lasting benefit, even when students are returned to normal sized classes after Year 3.

Improved outcomes for disadvantaged students may be due to a more effective socialisation of students to the school environment in smaller classes (Gustafsson 2003). It is reasonable to expect that the socialisation effect is stronger for educationally disadvantaged groups, acquiring skills and habits which make it possible for students to cope with the requirements of life in school. Socialisation appears to be an important contributing factor to student success within the school environment as a means of promoting engagement, particularly in the early years of schooling.

On teacher competence, Gustafsson (2003 p.102) sums up that:

there are important relations between different indicators of teacher competence and student achievement. This seems to be true for teacher education, experience, measured knowledge and skills, and in-service training.

Gustafsson cites Darling Hammond that the teacher competence involves being able to take the perspective of the learner and to use a broad repertoire of approaches skilfully, to undertake teaching that is purposeful and diagnostic and that responds to students’ needs as well as curriculum goals.

iv. Early childhood and non-cognitive development

Separate from these forms of analysis is the increased attention given to early childhood development (see COAG 2006). An illustration of the issues can be found in the work of Heckman (2006). Heckman a Nobel Prize winner in economics has researched the effects of early childhood intervention for less advantaged students. Two of the key findings from this are:

– the pay off to investment in early childhood is far larger than intervention for older disadvantaged persons, and

– the early intervention needs to support both cognitive and non-cognitive abilities.
Heckman says that much policy discussion is focussed on cognitive test score measurement, even though cognitive test scores miss important aspects of human development. Cognitive and non-cognitive ability are both important in explaining schooling, crime and a variety of other outcomes. Non-cognitive ability is neglected in much public policy discussion regarding early childhood. A principal source of Heckman’s data on this was the longitudinal study of the Perry Pre-School Program in the USA where the effects on cognitive achievement later in school were not marked but the rates of school completion and post-school experience markedly superior.

1.3 DEECD literature review

The review, which is a supplementary paper for this report, listed some of the social factors associated with lower educational achievement. Disadvantaged students are often from backgrounds with more than one of the following factors:

− low income levels
− low parental employment
− single parent household
− parents with low education level
− non-English speaking background (some groups)
− high mobility, and
− Indigenous background.

Disadvantaged students in schools with a large proportion of students from similar backgrounds in a particular school are likely to have poorer educational outcomes than similar students in a school with a broader social mix (McGaw & Lamb 2007; Erebus International 2005). The clustering of students of low socioeconomic background in particular regions and schools has tended to be more pronounced in recent year (Lamb 2007). Many of the schools they attend have suffered declining enrolments. Some of these schools have difficulty in attracting and retraining good teachers. They can have very high rates of teacher turnover and this can undermine the effectiveness of programs to assist disadvantaged students. However, there are also some schools with declining enrolments that have a disproportionate number of very experienced staff with consequences for the school budget.

The effects of social background on student performance are substantial but it is also noted that schools vary considerably in the performance of their students even controlling for student background.

Particular approaches have been grouped under several themes (as suggested by Teese 2005). They are staffing depth/capacity, program structure and content, the ways the program is presented to engage students, the ways teachers and students relate to each other, and relationships to parents and the community, all areas that have been associated with improved performance of students from disadvantaged backgrounds. Table 2 provides a summary of key themes from the literature review.
Some, but not all of the themes and ideas, were evident in the case studies and many schools responded in the survey on the relevance to most of the themes.

### Table 2. Literature on successful equity strategies

<table>
<thead>
<tr>
<th>Theme</th>
<th>Examples in the literature</th>
</tr>
</thead>
<tbody>
<tr>
<td>Staff depth/capacity</td>
<td>- Recruitment and selection of appropriate staff</td>
</tr>
<tr>
<td></td>
<td>- Staff retention influenced by a range of teacher development activities and teacher workloads</td>
</tr>
<tr>
<td></td>
<td>- Improved teacher education</td>
</tr>
<tr>
<td></td>
<td>- Provision of particular staff positions such as welfare coordinator or career advisor</td>
</tr>
<tr>
<td>Program depth/structure and content'</td>
<td>- Pre school experience</td>
</tr>
<tr>
<td></td>
<td>- Extra instructional time on key learning areas</td>
</tr>
<tr>
<td></td>
<td>- Recognise needs and cultures</td>
</tr>
<tr>
<td></td>
<td>- Remove barriers to higher level learning</td>
</tr>
<tr>
<td></td>
<td>- Early identification of learning needs</td>
</tr>
<tr>
<td></td>
<td>- One to one or intensive instruction</td>
</tr>
<tr>
<td></td>
<td>- Assistance with pathways in secondary education</td>
</tr>
<tr>
<td>Student-to-program relationships</td>
<td>- Ways of supporting student engagement</td>
</tr>
<tr>
<td></td>
<td>- Authentic activities such as the arts, with student performances</td>
</tr>
<tr>
<td></td>
<td>- Learner centred programs</td>
</tr>
<tr>
<td></td>
<td>- Challenging program</td>
</tr>
<tr>
<td></td>
<td>- Student voices</td>
</tr>
<tr>
<td></td>
<td>- Safe environment</td>
</tr>
<tr>
<td>Student-to-teacher relationships</td>
<td>- Building trust,</td>
</tr>
<tr>
<td></td>
<td>- Recognising cultures affect learning</td>
</tr>
<tr>
<td></td>
<td>- Guidance</td>
</tr>
<tr>
<td></td>
<td>- Relationships among staff and principal</td>
</tr>
<tr>
<td>Building positive relationships with family and the community</td>
<td>- Relationships with parents</td>
</tr>
<tr>
<td></td>
<td>- Links with local community and parents</td>
</tr>
</tbody>
</table>

Staff depth/capacity covers schools’ human resource practices including recruitment, induction, capacity building and retention, while program breadth relates to both the structure and the content of programs. Student-to-program relationships includes the elements of engagement, choice, meaning and the transparency of benefits for students, while teacher-to-student relationships is about levels of care and commitment, the quality of communication, feedback and respect for what both teachers and students can contribute to teaching and learning.
Items clearly of importance such as pre-school and child care experience have not until recently been the direct concern of the Department and were not featured in the current study but need to be considered further. The interconnection of many of the approaches needs to be noted. For example, the discussion of teacher depth does not explicitly mention smaller classes. However, teacher retention is seen to be affected by class size and workloads. A key example in program breadth is increased instructional time on key learning areas in small groups and this too requires additional staff. This link of staffing to some of the important approaches to improving the education of the less advantaged helps explain its importance in some of the findings of the survey and interviews conducted in this study.

It can be noted that the categories of the literature review (staff capacity, program content and structure, student-to-program relationships, student-to-teacher relationships, and building positive relationships with family and the community) to a considerable degree reflect the strategies in the DEECD Curriculum and Planning Guidelines relating to equity funding.

1.4 Summing up

This brief review of context suggests that:

– we need to see the use of equity funds in conjunction with the wider forms of school improvement implemented under the Blueprint

– that school programs for equity need to be directed not just at one activity, but at a range of activities related to staff depth, program depth, student-to-program relationships, student-to-teacher relationships, and building positive relationships with family and the community

– measurement of the effects of expenditure on test results is likely to be difficult but the lack of short term indicators of improved performance should not be too readily taken to mean a program is not effective, and

– that we need to be aware of non-cognitive factors, and that student engagement and parent satisfaction may be important for this as well as for their relationship to test scores.

Section 2 of this report presents the main findings based mainly on data from the survey and the case studies and analysis of data on high performing schools. The more detailed reports on each of these are provided in the supplementary papers.
2 Equity strategies used in Victorian government schools

The following analysis is based on the following sources of data:

<table>
<thead>
<tr>
<th>Source</th>
<th>Scope</th>
<th>Responsibility</th>
</tr>
</thead>
<tbody>
<tr>
<td>Performance data on schools receiving equity funding</td>
<td>Data held in DEECD</td>
<td>DEECD</td>
</tr>
<tr>
<td>Interviews with regional office staff</td>
<td>Staff in 9 regional offices</td>
<td>CEET</td>
</tr>
<tr>
<td>Literature review</td>
<td>Research on national and international websites 1992-2007</td>
<td>DEECD</td>
</tr>
<tr>
<td>Responses to Online Survey</td>
<td>463 schools</td>
<td>CEET</td>
</tr>
<tr>
<td>Performance data on well performed schools with high SFOs</td>
<td>11 well performed schools that also responded to the online survey</td>
<td>CEET</td>
</tr>
<tr>
<td>Case study schools</td>
<td>12 schools (8 primary, 4 secondary)</td>
<td>CEET</td>
</tr>
</tbody>
</table>

This overview of the strategies being used in Victorian schools is based principally on responses to an on-line survey supported by case studies and interviews with regional officers. A total of 670 schools were invited to respond to the survey and 463 usable responses were achieved, resulting in a response rate of almost 70 per cent.

A subset of the overall data is provided by 32 schools most with relatively high density SFOs which are achieving better than predicted outcomes against AIM reading and numeracy tests (at primary level), VCE outcomes (at secondary level), absences, parent, teacher and student survey data, and rates of retention. The DEECD data analysis of these schools that were performing well indicated that high performance in these schools is associated with lower rates of student absence, high student motivation, and higher parent satisfaction.

Analysis of Departmental school performance data does not show a relationship between changes in equity funding in recent years and changes in student performance as measured by test scores and mean VCE scores. This is not surprising given the difficulty experienced in research on establishing a link in funding and student performance (Hanushek 2006). However, this cannot be taken to imply that equity funds have not been well used. The time since the funding changes were introduced is too short to enable any firm conclusions to be drawn and the effects might be wider than can be indicated by test scores or VCE mean scores.

The survey and case studies on the use of equity funding in Victorian schools suggest that, while schools use equity resources for diverse purposes, there are also some clear themes that emerge as the major strategies being adopted by schools.
2.1 How schools allocate their budgets to equity strategies: overview

In the absence of requirements for the various resource elements of school budgets to be separately accounted for, many schools combine their SRP equity and MIPs funding with other SRP funding to support a wide range of teaching, welfare, and related initiatives.

Through the survey and the case studies it was not possible to determine the exact quantitative allocation of the separate forms of equity funding. Schools in general do not monitor the use of their funds in that degree of detail.

Where equity funding comprises a relatively small part of a school’s overall resource package, a more direct relationship between the SFO funding and a specific equity strategy appears more likely. However, where schools receive a much larger component of their overall funding through the equity component of the SRP, it is more likely that these funds will be integrated with other budget elements and used to support staffing and program delivery across the school.

This finding is consistent with the views of Regional Office staff that schools tend to pool equity funds with other components of their budget and that it would be difficult to establish a direct correspondence between equity funding and equity initiatives. It is also consistent with the observations of the consultants reviewing the SRP.

Analysis of data on well-performed schools with high SFO density matched with their responses to the on-line survey indicates that these schools use a wide range of the staffing, program and relationship strategies identified in the literature review. However, because the funds may have been used in a diffuse way to support a range of equity-related strategies, it is not possible to be sure which strategies are more or less effective.

The Blueprint for Government Schools Accountability Framework focuses on performance rather than reporting on the specific expenditure of equity funds. However, it would be valuable to have a framework that encourages a clear link to be made between equity funding and the resultant equity strategies and outcomes in each school. It may be worth reviewing the effectiveness of some regions use of the school Annual Implementation Plan as a means of eliciting how schools are using equity funding, with a view to widening the use of this approach.

Schools which have received an increase in equity funding through the introduction of the SFO have had increased flexibility to develop new initiatives. However, schools receiving reduced funding have still been able to develop new equity strategies where school leadership has been evident.

Schools not receiving any equity programs are still responsible for their relatively small number of less advantaged students. They can be expected to do that within their normal budget. A good example is the program of ‘Hands on Learning’ discussed below that was developed by one school and is now also used at eight other schools.

The survey did provide a response from schools on the range of activities supported by equity funds—if not the amounts of the funds devoted to each activity. Table 3 shows the responses by schools aligned with the major themes identified in the literature review.
<table>
<thead>
<tr>
<th>Areas funded</th>
<th>Primary</th>
<th>Secondary</th>
<th>P – 12</th>
<th>All</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>1. Staff depth/capacity</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Ratio student: teacher</td>
<td>70.7</td>
<td>57.6</td>
<td>68.7</td>
<td>65.3</td>
</tr>
<tr>
<td>Staff professional development</td>
<td>54.8</td>
<td>55.3</td>
<td>50.0</td>
<td>53.7</td>
</tr>
<tr>
<td>Teacher practice</td>
<td>35.2</td>
<td>27.5</td>
<td>33.3</td>
<td>33.0</td>
</tr>
<tr>
<td>Staff participation in leadership development</td>
<td>23.9</td>
<td>21.2</td>
<td>25.0</td>
<td>23.7</td>
</tr>
<tr>
<td>Staff retention</td>
<td>13.9</td>
<td>17.6</td>
<td>6.2</td>
<td>14.5</td>
</tr>
<tr>
<td>Staff recruitment/selection</td>
<td>12.5</td>
<td>21.4</td>
<td>16.7</td>
<td>14.2</td>
</tr>
<tr>
<td><strong>2. Program breadth/structure and content</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Literacy</td>
<td>75.2</td>
<td>78.6</td>
<td>66.7</td>
<td>74.1</td>
</tr>
<tr>
<td>Numeracy</td>
<td>63.3</td>
<td>65.3</td>
<td>66.7</td>
<td>63.1</td>
</tr>
<tr>
<td>Student academic performance</td>
<td>52.6</td>
<td>53.1</td>
<td>55.5</td>
<td>51.2</td>
</tr>
<tr>
<td>Students receiving ESL support</td>
<td>36.7</td>
<td>35.3</td>
<td>18.7</td>
<td>34.2</td>
</tr>
<tr>
<td>Curriculum development</td>
<td>31.5</td>
<td>33.7</td>
<td>33.3</td>
<td>32.6</td>
</tr>
<tr>
<td>New arrival students receiving intensive or targeted support</td>
<td>31.3</td>
<td>24.7</td>
<td>25.0</td>
<td>31.5</td>
</tr>
<tr>
<td>Ratio computer: student</td>
<td>27.0</td>
<td>25.8</td>
<td>18.7</td>
<td>28.7</td>
</tr>
<tr>
<td>Student pathways/transition</td>
<td>8.9</td>
<td>87.8</td>
<td>77.8</td>
<td>25.5</td>
</tr>
<tr>
<td>Koorie students reaching national benchmarks</td>
<td>5.8</td>
<td>5.9</td>
<td>6.2</td>
<td>20.7</td>
</tr>
<tr>
<td>Student career support</td>
<td>0.6</td>
<td>73.5</td>
<td>77.8</td>
<td>5.3</td>
</tr>
<tr>
<td><strong>3. Student-to-program relationships</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Student welfare/support</td>
<td>63.6</td>
<td>65.3</td>
<td>77.8</td>
<td>64.6</td>
</tr>
<tr>
<td>Student opinion - connectedness with school</td>
<td>42.8</td>
<td>64.7</td>
<td>25.0</td>
<td>48.6</td>
</tr>
<tr>
<td>Student motivation/engagement</td>
<td>41.9</td>
<td>67.3</td>
<td>72.2</td>
<td>46.4</td>
</tr>
<tr>
<td>Student attendance</td>
<td>41.6</td>
<td>63.3</td>
<td>66.7</td>
<td>46.3</td>
</tr>
<tr>
<td>Student retention</td>
<td>4.0</td>
<td>70.4</td>
<td>66.7</td>
<td>21.8</td>
</tr>
<tr>
<td><strong>4. Student-to-teacher relationships</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Building student/teacher relationships</td>
<td>29.7</td>
<td>40.8</td>
<td>44.4</td>
<td>32.8</td>
</tr>
<tr>
<td><strong>5. Building positive relationship with family and the community</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Employment of welfare officers</td>
<td>51.7</td>
<td>44.7</td>
<td>25.0</td>
<td>47.6</td>
</tr>
<tr>
<td>Parent satisfaction with schooling</td>
<td>31.3</td>
<td>32.9</td>
<td>23.0</td>
<td>31.8</td>
</tr>
<tr>
<td>Supporting/engaging parents</td>
<td>28.4</td>
<td>29.6</td>
<td>22.2</td>
<td>28.3</td>
</tr>
<tr>
<td>Relationships with the community</td>
<td>23.2</td>
<td>32.7</td>
<td>27.8</td>
<td>26.3</td>
</tr>
<tr>
<td>Employment of Koorie Educators or Home School Liaison officers</td>
<td>5.8</td>
<td>7.1</td>
<td>6.2</td>
<td>5.8</td>
</tr>
</tbody>
</table>
The items in Table 3 are presented according to the percentage of schools responding. In relation to staff depth/capacity the most common response relates to teacher numbers, though professional development, teacher practice and leadership development also rank reasonably highly.

Student welfare support and the related employment welfare officers (listed in section 5 of the table) also rank very highly in the use of funds. The use of funds to support student motivation/engagement and student attendance is reported by a considerable number of schools. Only about a quarter of schools report using the funds to support community engagement and parent satisfaction.

There are some differences by school level. Primary schools cite teacher ratios and teacher practice more than secondary schools where staff recruitment and selection gets relatively more attention. Secondary schools not surprisingly give greater attention to pathways and careers. Secondary schools give more attention to aspects of student to program relationships and student to teacher relationships. A higher proportion of primary schools indicate support for welfare activities.

2.2 Student:teacher ratios and staff capacity

The responses to the survey also reinforce the view that a large proportion of schools are using equity funding to support aspects of ‘staff depth’ and capacity including professional development and recruitment and selection practices.

One of the main equity strategies being pursued by schools is to reduce student to staff ratios and to use the staff for a range of programs some of which lead to reduced class sizes. This was indicated for the majority of schools in the survey and confirmed in the case studies.

Analysis of the equity strategies of a sample group of well performed schools with high SFO reveals that nine out of eleven report that the greatest benefit of equity funding over the past three years has been the capacity to improve student: teacher ratios through smaller class sizes. Various programs to support student achievement were seen as dependent on this. The case for smaller classes for the first years of primary education for less advantaged students is supported by research literature as discussed earlier (Gustafsson 2003).

A higher proportion of primary schools than secondary schools are using their equity funding to improve student: teacher ratios. 71 per cent of primary schools responding to the survey reported use of this strategy, against 58 per cent of secondary schools and 69 per cent P-12 schools. The case studies confirmed this trend, with five of the eight primary schools adopting this approach.

Principals of schools with high SFO density located in communities where a high proportion of the student population comes from disadvantaged backgrounds, argue that smaller class sizes are a pre-requisite for student engagement and achievement in literacy and numeracy. Case study primary schools with high numbers of students from refugee backgrounds or located in communities of concentrated disadvantage are particularly likely to arrange smaller class groups.
An example of quite deliberate use of small class groups for disadvantaged students was provided by a school where the SFO density is very high at 0.87 in the case studies. The school has opted to provide extra instructional time on literacy and numeracy. The whole morning program was devoted to literacy and numeracy with students in relatively small groups of about 14, some with two teachers in the classroom. Other parts of the curriculum were somewhat compressed. The school had opted not to employ any specialist staff in fields such as art or music.

The dilemma of trying to increase attention to literacy and numeracy at the expense of other parts of the curriculum was highlighted in the recent report by Angus et al (2007). This is an issue for further consideration.

The survey indicated that literacy and numeracy coaches are frequently appointed to lead teaching staff in testing, benchmarking levels and developing strategies for teachers. The role of the coaches is to assist teachers to develop classroom practice leading to improved student learning outcomes.

There appear to be a considerable number of schools, especially primary schools that have very experienced staff and have been facing problems of balancing their budgets under the SRP. In these cases it is less clear that the use of equity funds to sustain or reduce the student to teacher ratio is a deliberate equity strategy. The issue is an important one for further investigation. Even schools strongly committed to improving the outcomes of disadvantaged students referred to the problems of balancing their budgets and its effect on the use of equity funds.

There are also schools with very high turnover. Developing and maintaining equity strategies and developing strong relationships with students and parents require the retention of competent staff.

There are clearly a large number of schools who employ additional teachers to support equity strategies but there is a need for a more detailed understanding of the relationship of student to teacher ratios, class sizes and staff retention.

Note should also be made of the importance of deploying competent staff to the students with high needs. Work undertaken by Lamb and others for the review of the SRP indicates that high performing schools allocate a considerable proportion of experienced competent teachers to the early years of primary and secondary schooling.

2.3 Literacy and numeracy

Three-quarters of all responding schools report that they use equity funds to support literacy and around two-thirds for numeracy. These figures were reasonably similar at both primary and secondary schools, and were reported much more frequently than other forms of program responses, such as curriculum development. Literacy is emphasised more than numeracy at both primary and secondary level. Schools report that there are fewer tools and packages available to assist numeracy development than are available for literacy.

In some schools, an emphasis on providing an increased instructional time on literacy and numeracy is combined with a strategy of creating smaller class sizes through directing funds to
appoint additional staff, particularly within primary schools. Hence strategies for literacy and numeracy are bound up with those on student to teacher ratios.

The literature review identifies that student outcomes can be improved through increased instructional time for targeted students if extending learning time is be focussed on ‘academic learning’. Several case study schools provided examples of this approach, for example the provision of three and half hours of literacy and numeracy instruction each day based on a folio documenting student progress which has progress points and student needs identified.

Approaches reported by schools include a mixture of provision of additional tuition on a one to one basis, small groups of withdrawn students, and additional teaching resources within the normal classroom. Literacy and numeracy responses include reading recovery programs, speech pathology, language enhancement, ESL, THRASS, Multilit and Support for Bridges literacy.

2.4 Increased welfare support and relationships with parents

More than two-thirds of schools responding to the survey use some equity funding for student welfare support. The use of equity funds to support student welfare appears to be high across primary, secondary and P-12 schools.

Equity funding is used to supplement the funds provided for welfare officer positions or the employment of welfare or counselling officers in secondary schools. This was reported by 52 per cent of primary schools and 45 per cent of secondary responses.

As an example, a well performed school with a high SFO density reports that inequity permeates most aspects of their students' lives. Equity money goes to support student welfare through the purchase of school uniforms, paying for the breakfast programs, and similar activity.

A strong emphasis on strengthening welfare support could be seen as consistent with one of the Department’s stated goals of equity funding being to increase the level of engagement, participation and retention of students from a low socio-economic background. These activities relate also to non-cognitive development, emotional intelligence as stressed by Heckman (2006).

A case study school reported using equity funding to support Koorie students through a team of three staff who focus on providing academic support, pathways mentoring, attendance strategies, cultural programs, and general support to students and their families. There is also a homework support centre that operates after school one day a week. The homework centre provides afternoon tea, and opportunities to socialise, as well as study support.

This extra support overlaps the assistance provided through the school’s literacy and numeracy tutoring support programs. The Koorie student achievement officer has particularly focussed on improving attendance, involving a lot of work with parents. Koorie attendance has been slowly improving, and 2006 data demonstrated improved attendance against 2005 benchmarks, accompanied by evidence of improved performance in literacy and numeracy.
Another school responding to the survey reports on a welfare program developed by the Pupil Welfare Officer using equity funding to create a model designed to assist all staff to better engage students in classroom and school programs leading to improved student learning outcomes. Resilience development based on the four ‘foundations’ of the You Can Do It program (‘confidence’, ‘persistence’, ‘getting along’ and ‘organisation’) is incorporated in all school programs and student relationships. Distinct changes in teacher practice are reportedly measurable as a result of this emphasis.

Directing funds to welfare support can also assist other teaching staff to gain a better understanding of the challenges facing students from disadvantaged backgrounds in the school environment and how these students learn.

2.5 Providing access to extra activities

A fourth strategy that is currently used by schools is to direct equity funding to ensure that all students can participate in programs and activities that they might otherwise not be able to access or afford in the local community. The rationale is that supporting such participation will increase student interest and involvement in school and gain the support of the local community. These activities are diverse and cover a wide range of activity.

Examples of such programs include those that address physical development, and incorporate disabilities programs, sporting programs such as swimming, aerobics, after schools sports, outdoor education and walk to school programs. They are also used to support creative programs including music, drama, art, and after school and out-of-school activities which the literature review indicates can be important for student engagement and achievement.

Subsidies are also provided to students to enable them to attend school camps. Extra activities include community education and interaction including drug education, parent and family support programs, family fun nights, providing student breakfasts and homework support programs.

This reflects the research reported through the literature review suggesting that effective strategies for extending learning include camps, homework clubs, study skill centres and after-school programs. Some of the reported strategies focussed on academic learning, some on social learning and some on a combination of both. Extracurricular activities are reported to be of value in terms of student engagement, connectedness and opportunity.

2.6 The influence of school circumstances on the strategies adopted

School circumstances influence the equity strategies employed and the extent to which students with particular needs are identified and assisted. Discussing these we draw on some of the matters already raised.

A key variable is the location of schools within communities that must deal with the impact of compounded effects of concentrated disadvantage. In several of the schools the large majority of the parents do not have paid employment. The schools have difficulty in raising local funds. The children have little in the way of role models to support motivation for learning and career
ambition. Several of the case study schools reflect the literature on concentrated disadvantage providing examples of environments in which the majority the student population have learning and relationship issues.

A small primary school included in the case studies reported that in each of four classes up to half the students demonstrate severe behavioural issues. The school estimates that more than 50 per cent of enrolled students come from dysfunctional families, and high rates of family violence, neglect and abuse reported. In such schools, equity strategies become a core of the school’s program, rather than a specific initiative for a disadvantaged cohort within the school.

In addition to the fundamental differences between Primary, Secondary and P-12 schools (secondary colleges strategies include transition and career support while primary schools focus more on teacher practice and on student: teacher ratios) the impact of rising or falling enrolments can have a large influence on a school’s capacity to utilise equity funding effectively. Larger schools have greater flexibility in how they can use equity funding to support and supplement existing strategies. There has been a tendency for schools with concentrations of disadvantaged students to decline in size in recent years (Lamb 2007).

Schools in deficit with their overall budget are more likely to be using equity funding to support the general staffing needs of the school if there is a fairly expensive staff profile, or if there is a need to augment a reduced budget due to declining enrolments.

Schools with relatively high equity funds do however appear more likely to have greater capacity and thus flexibility to use equity funds to support a diverse range of programs, staffing requirements, and welfare support structures. For example, several case study schools reported using their substantial equity funds to support a variety of existing programs as well as to develop new curriculum.

Schools with a lower SFO and thus a smaller component of equity funding appear more likely to allocate these resources to a particular initiative and to have put in place measures that systematically use and monitor data to identify those students requiring a specific and targeted intervention.

The extent to which schools are able to access external expertise can also influence and shape the school’s equity strategy. A numeracy tuition initiative developed at one case study school was an outcome of the existing relationship between the school and educators from an international university who were already working within the school on other initiatives. This external expertise provided a methodology and professional support for the development of a numeracy intervention. Another case study school was able to extend the literacy support program through the range of additional assistance provided by a local high school, the Salvation Army and university social work students. However, the number of schools responding to the survey indicating that they use equity funding as leverage to obtain funding from other sources, such as Commonwealth programs, was very low.

The location of the school and related to this its capacity to attract staff also have an impact on equity strategies. Schools in more remote locations face challenges in relation to recruitment and retention of high quality teaching staff. In more geographically isolated locations new staff are
difficult to recruit, and professional development opportunities come at a cost, so greater emphasis is placed on developing the capabilities of staff through in-house coaching and team teaching. Several case study school on the other hand are close enough to the city to be able to target and recruit staff specifically to meet their equity needs.

There is limited information available on any change to strategies over time, as the new equity funding has been in place for less than three years. While increased funding to schools with higher concentrations of SFO has enabled some of these to develop new equity strategies, in many cases equity strategies are a continuation of approaches previously developed under earlier funding programs such as Access to Excellence, which was also used to support literacy and numeracy programs, and smaller class sizes.

2.7 Best practice

Establishing what constitutes best practice in approaches to improving equitable outcomes is made more complex by the fact that most schools (rightly) simultaneously combine a variety of strategies, as they attempt to address skill development, engagement, motivation and support of disadvantaged students. Relatively few schools appear to concentrate on only one specific area for a lengthy period. As a result, positive outcomes may be influenced by a range of equity strategies, and would require analysis over a longer period to determine with any certainty what constitutes best practice.

The following table provides an introduction to equity strategies and some indicative outcomes of schools that have been identified as well performed whilst having relatively high SFO indexes. The table combines information on equity strategies reported by schools through an on-line survey and data on school performance held by DEECD.

The data analysis carried out by DEECD did not find a relationship between school performance on test or exam results and changes in equity funds in the years 2004 to 2006. This is not to say that the programs to which the funds were devoted were not effective in a wide range of circumstances, however, the time period was short. Even over a longer time it is often very hard to find a relationship as attested by Hanushek (2006).

Data for the schools with above expected average performance in recent years did not appear to show consistent results over the years 2004 to 2006 though as noted in the table below some achieved remarkable improvement in a number of areas. However, there are some schools in the table below where some of the measures of opinion are not moving in a positive direction.

Table 4. Successful equity strategies: high SFO schools with good performance

<table>
<thead>
<tr>
<th>School</th>
<th>Strategies</th>
<th>Measures</th>
</tr>
</thead>
</table>
| School A        | Major focus is on use of equity funds to support curriculum programs. Smaller class sizes used to provide more attention to literacy and numeracy and implementing | • Year 5 AIM reading tests 4 year average exceed prediction by approximately 0.5  
• Year 5 AIM numeracy tests 4 year average exceed prediction by  |
<p>| Approximately 150 students, SFO 0.84 |                                                                                       |                                                 |</p>
<table>
<thead>
<tr>
<th>School</th>
<th>Strategies</th>
<th>Measures</th>
</tr>
</thead>
<tbody>
<tr>
<td>School B</td>
<td>Individual learning plans. Some attention also to attendance, welfare support and staff development</td>
<td>Approximately 0.60  - Absences reduced from approximately 11.0 (2004) to 8.0 (2006)  - Staff reports higher on all measures from 2004 to 2006  - Students measures also very high and increased from 2004</td>
</tr>
<tr>
<td>School C</td>
<td>Very broad based approach to equity strategies encompassing literacy &amp; numeracy, welfare support, retention and attendance, careers pathways and transition support, teacher practice and professional development, and curriculum development Reports low average class sizes and student: teacher ratios as major contributors</td>
<td>Year 5 AIM reading tests 4 year average exceed prediction by approximately 0.40  - Year 5 AIM numeracy tests 4 year average exceed prediction by approximately 0.40  - Absences reduced from 15.0 (2004) to 13.0 (2006)  - Parent overall satisfaction high and satisfaction with teaching quality improved 75.0 (2004) to 93.0 (2005)  - Dramatic improvement on all student measures 2004-2006</td>
</tr>
<tr>
<td>School D</td>
<td>Very broad based approach to equity strategies encompassing literacy &amp; numeracy, welfare support, retention and attendance, careers pathways and transition support, teacher practice and professional development, and curriculum development Particular emphasis on targeted individual teaching to students requiring literacy intervention at each Year level</td>
<td>Year 5 AIM reading tests 4 year average exceed prediction by approximately 0.50  - Year 5 AIM numeracy tests 4 year average exceed prediction by approximately 0.70  - Parent, staff and student data shows weak or negative trends off a high base</td>
</tr>
<tr>
<td>Schools E</td>
<td>Strong focus on literacy and numeracy strategies, and on student academic performance The main focus is on employing staff to keep</td>
<td>Year 5 AIM reading tests 4 year average exceed prediction by approximately 0.40  - Year 5 AIM numeracy tests 4 year average exceed prediction by approximately 0.30</td>
</tr>
<tr>
<td>School</td>
<td>Strategies</td>
<td>Measures</td>
</tr>
<tr>
<td>---------</td>
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</tbody>
</table>
| School F | student:teacher ratios low and classes small                                | • Absences reduced from approximately 14.0 (2004) to 9.5 (2006)  
• Student measures very high over period 2004-2006  
|          | Strong emphasis on provision of student welfare support, including funding employment of welfare officer, breakfast clubs, and uniform purchases |                                                                                                                                           |
| School G | Very broad based approach to equity strategies encompassing literacy & numeracy, welfare support, retention and attendance, careers pathways and transition support, teacher practice and professional development, and curriculum development  
Reports low average class sizes and student: teacher ratios as major contributors, as well as new arrivals in the country receiving intensive targeted support | • VCE all study 4 year average exceeds prediction by approximately 2.6  
• Absences reduced from approximately 18.5 (2004) to 11.5 (2006)  
• Year 7-12 real retention shows strong increase  
• Parent general satisfaction and with quality of teaching both improved from 2004 to 2005  
• Student measures show dramatic improvement from 2004 to 2006. ‘Connection’ increases from 65 to 91, ‘motivation’ from 89 to 100, ‘safety’ from 39 to 81 |
| School H | Specific strategies on literacy & numeracy, and raising academic performance through improved student: teacher ratios and smaller class sizes.  
Also a focus on retention and attendance | • VCE all study 4 year average exceeds prediction by approximately 1.5  
• Parent satisfaction score rises from 4.5 (2004) to 11.5 (2005)  
• Real retention rises from approximately 56.0 (2003) to 64.5 (2005) |
| School I | Focus on literacy and academic performance, attendance motivation and retention, and careers support and transition.  
A range of support staff are employed, including teachers to run a bridging program for Language Centre students with little previous experience of schooling in their home country | • VCE all study 4 year average exceeds prediction by approximately 2.3  
• Absences reduced from approximately 19.0 (2004) to 12.5 (2006)  
• Parent satisfaction measures show increase from a low base  
• Staff measures gradually improving from a low base |
Using this table as a basis, it is possible to identify some common themes for ‘successful strategies’ based on survey responses from schools with high SFOs identified as producing better than expected outcomes. These have been supplemented by case study examples in which evidence is available of improved outcomes for particular students targeted for assistance through equity funded initiatives.

**Primary schools**

1. **High SFO primary schools providing good outcomes frequently report the creation of small class sizes, and combine this strategy with the provision of intensive assistance in literacy and numeracy teaching and tuition.**

   A good example is provided by School D which creates very small preparatory classes (16 students in each group) so that students can be given more individual literacy teaching. Individual assistance to students at risk in literacy also continues from Years 2-6.

   Improved student: teacher ratios at primary level enable more attention to be given to individual students in basic areas of literacy and numeracy, and for the implementation of individual learning plans for students. Employment of additional staff to keep classes small also enables specialist curriculum offerings to be introduced.

   As mentioned earlier there is research support for smaller class sizes in early grades, particularly for students with less favourable socio-economic backgrounds (Gustafsson 2003).

   Socialisation appears to be assisted by smaller classes and to be an important contributing factor to student success within the school environment as a means of promoting engagement, particularly in the early years of schooling.
In line with Heckman’s work on early childhood cited earlier this suggests the need for broader measures of student achievement than just test scores. Development of measures around improvements in ‘emotional intelligence’ would be useful and should be considered to provide a fuller measure of student progress than the current focus on literacy and numeracy.

However, while these studies conclude that reduced class size may be of importance for particular categories of students it is still important to note that teacher competence remains the single most important resource factor.

2 Well performed schools with high SFO also report the use of strategies to **identify students requiring additional support and tuition.** Such intervention programs require staff to identify students and cohorts most 'at risk'. Routine processes such as analysis of performance data and/or regular staff meetings are used to target assistance to these students.

Extra teaching support is timetabled to address these areas of need. In some cases, an additional “intervention teacher” takes the grade to allow the class teacher to provide focussed, explicit teaching to identified 'at risk' students. Good practice includes regular review of the intervention program and modifications required to continue meeting emerging needs.

Active identification of students requiring intensive assistance appears to be more common in schools with lower SFO as it is more feasible to identify those in need of specific assistance. On the other hand, schools located in neighbourhoods with high levels of disadvantage may adopt more universal approaches. However, those schools actively identifying particular students for literacy and numeracy assistance appear more likely to produce improved outcomes.

3. **Maximising the use of staff expertise** is a third emerging theme producing improved outcomes. As an example, a program established in one high performing primary school provides teaching at each grade level to students identified as requiring an intervention program to improve literacy. Staffing for the program draws on the expertise of the Reading Recovery teacher each afternoon (having completed the Year 1 Reading Recovery program in the morning), employing an experienced teacher familiar with literacy intervention part-time and the Assistant Principal supporting groups of students with literacy in Years 5 and 6.

At the same school, literacy intervention teachers model best practice in the classroom for other staff.

A survey response from a P-12 school reports the appointment of a full-time Literacy Coordinator through equity funding. This has resulted in higher frequency monitoring of both year level and whole school student literacy achievement data. Constant analysis of the data has been accompanied by the development of targeted literacy strategies outlined and modelled to staff. The Coordinator leads a group of volunteers trained on campus who assist identified individual students with tailored programs to improve outcomes. There was a significant improvement in literacy data across P-12 at the end of 2006.

4. In schools with high SFO density there are **extensive welfare needs** across the school community, and in many aspects of each student’s life that can impact on the student’s ability
to learn and to participate fully. In such cases, equity money is used to support student welfare through such initiatives as the purchase of school uniforms, paying for breakfast programs, funding excursions and a range of similar activities.

**Secondary schools**

1. High performing secondary schools with high SFOs also make use of smaller class sizes in the middle years, particularly where there are high numbers of enrolled students from very low socio economic backgrounds, and/or who speak a language other than English at home.

   One good example of this approach is provided by School G which has a very small cohort of students in Year 7. Almost one third of students either access disability and impairment funding or have a current application. Many of the remaining two thirds of students come from families with a very low socio economic background and speak a language other than English at home. In order to cater for the learning needs of this group the school is operating two Year 7 groups of reduced numbers. This has enabled teachers to spend more time with each individual student and given them the time to develop curricula that responds to the needs of both the group and individuals within it.

   Research cited above suggests that the impact of lower student; teacher ratios on outcomes for disadvantaged students weakens as they progress through school, that the benefits are greatest in the first few years of schooling, and that there is no evidence for any positive effect after Year 9. However, principals at case study schools with high concentrations of disadvantaged students maintain that improved student: teacher ratios continue to be an important pre-condition for learning for these students into the early years of secondary school.

   Lower student: teacher ratios are a feature of both well performed schools with high SFO, and less well performed schools with high SFO, so smaller class sizes in and of themselves are unlikely to be sufficient to improve student outcomes in and of themselves. The importance of teacher competence, as well as program breadth needs to be more closely examined to determine how these factors interact in well performed schools with high SFO density.

   In order to be able to provide specific advice to schools on this issue, we recommend that further intensive investigation be carried out to determine the circumstances in which student: teacher ratios form part of an effective strategy to improve outcomes for disadvantaged students.

2. Equity funds are frequently directed to appointing additional staff to support high needs students. Secondary colleges employ a range of support and teaching staff to run programs for students at risk. Employment of additional literacy aides and tutors appears to be a common strategy. Reported benefits are increased levels of student retention and improved levels of achievement.

   For example, one case study school reported conducting a Reading Assistance Program with groups of approximately 5 students who are withdrawn from class four periods each week, and taught through a Reading Recovery proprietary product. The Reading Assistance program
is staffed by two teachers who assist between 80-90 students across Years 7 and 8. This approach involves pre and post-testing each student in the program.

3. **Student–teacher relationships** are also a focus for some well performed schools with a high SFO. Recognising the particular needs of disadvantaged students, schools place a strong emphasis on developing positive, healthy and worthwhile relationships between students and teachers. Time is invested into counselling students and ensuring that they and their families have access to a variety of support networks.

Staff selection can impact on school outcomes. Principals have a potentially important role in determining the quality of their schools by the selection of teachers. Two well performed case study schools provided examples of pro-active recruitment of young teachers based on criteria that included a strong sense of social justice and the capacity to contribute to improving outcomes for disadvantaged student. Recruitment focused on proactive recruitment through universities and tertiary fairs, and accorded a high priority. In both cases, the principals of these schools have a clear view about what qualities staff need to have that might make a difference to their relationships with students and understanding of the school and local community cultures.

The case studies support the finding in the literature review that in ‘high-impact’ schools ‘the principal exerts more control over who joins their staff.’

4. Well performed secondary schools with high SFOs also use equity funds to develop **specific programs to meet the needs of disadvantaged students.** The approach is based on the creation of a set of programs that are capable of meeting the diverse needs of students. Examples are the development of special electives such as VET Workplace Training for middle years students, or a building program in which small projects are undertaken by a registered builder working with teaching staff and up to 12 male students in Year 10.

5. A strong emphasis on **careers and pathways planning** is also evident in well performed schools with high SFOs. Disadvantaged students can have low aspirations. Schools have attempted to raise student aspirations through the introduction of intensive career counselling for students from Year 10 providing a considerable amount of time one on one with teachers exploring possible career paths. Comprehensive managed individual pathways programs have been introduced for all students from Years 9 to 12 and some schools have extended these to junior levels. Students receive advice and guidance both in large groups and individually, and have access to external support personnel on a weekly basis.

In the opinion of one principal at a well performed school with a high SFO, the school’s pathways project has made “an outstanding contribution” to improving the school’s VCE data for four years in a row. This has been achieved through ensuring that students appropriately select from VET, VCAL and VCE options (VET enrolments have grown significantly) and also helps students to more systematically access external resources as well as appropriate classes and content. This school allocates additional equity funds to supporting the MIPs strategy.
2.8 Conditions facilitating good practice

The case studies have identified a range of factors which appear to assist schools to develop effective equity strategies that will support student achievement.

1. Leadership and the use of data

Effective equity strategies are facilitated by strong school leadership and by a culture in which there is a strong emphasis on the use of data to monitor and drive performance, and to direct efforts. The use of data to identify and provide systematic help to those falling behind at school also focuses attention on measuring the subsequent impact on student performance. In this context, it is significant to note that approximately 60 per cent of secondary schools receiving MIPs funding do not use the Students at Risk mapping tool, so there is room for significant improvement in this area. On the other hand a case-study primary school with strong leadership had adopted the MIPs mapping tool to assist them to identify students requiring intensive assistance.

2. Access to external support and expertise

Effective equity strategies occur where schools have access to external support and expertise to help develop responses to the needs of students and to opportunities to learn from others’ experiences such as through conferences and seminars. Principals from several well performed schools with high SFOs made particular mention of the 2005 Equity Conference which they indicated had been valuable in developing their equity strategies.

The manner in which a school chooses to develop strategies to address equity issues is in many ways a very local one. No two schools are alike and have their own individual challenges regarding equity. One of the most useful strategies was the DoE Equity Conference in 2005. Personally I found it inspiring and many worthwhile practical examples were shared. (School G)

The usefulness of such forms of conferences is taken up in the findings of this report.

3. Partnerships

A further factor underpinning effective strategies is the capacity to form partnerships with the community and external agencies to leverage support for providing attractive alternative learning experiences. There is enormous variety in the examples evident in the case studies, including the youth-led research project one case study school, the bicycle repair program at another, and other initiatives such as community VCAL programs, and kitchen in the garden programs. These are all to some degree dependent on the support of parties external to the school.

A conference on good practice?

School circumstances differ and the mix of programs and activities need to be varied to the particular circumstances. All the high performing schools have good leadership and staff and a broad range of activities which are not easily described as a particular programs. However many
schools also have particular activities that appear to be successful and which it is important to be brought to the attention of other schools. This can be done through teacher development programs and improved website information. One strong suggestion was that conferences similar to the one held in 2005 would be particularly valuable. The program for such a conference might include presentations from the schools listed in Table 4. Some further examples of strategies schools considered successful are given in the appendix.

Table 5. Suggestions for conference on good practice

<table>
<thead>
<tr>
<th>Overall program with high performance</th>
<th></th>
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</thead>
<tbody>
<tr>
<td>School A</td>
<td>Very broad based approach to equity strategies encompassing literacy &amp; numeracy, welfare support, retention and attendance, careers pathways and transition support, teacher practice and professional development, and curriculum development. Class sizes and student: teacher ratios seen as major contributors, as well as new arrivals in the country receiving intensive targeted support.</td>
</tr>
<tr>
<td>School B</td>
<td>Major focus is on use of equity funds to support curriculum programs. Smaller class sizes used to provide more attention to literacy and numeracy and implementing individual learning plans.</td>
</tr>
<tr>
<td>School C</td>
<td>Strong focus on literacy and numeracy strategies, and on student academic performance. The main focus is on employing staff to keep student:teacher ratios low and classes small.</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Staff depth/capacity</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>School D</td>
<td>Staff recruitment and induction: The principal recruits teaching graduates directly from university campuses, having identified potential candidates through contact with the school experience coordinator on campus. The principal conducts an informal meeting with potential recruits and assesses them against four key criteria of: innovativeness, adaptability, high IT skills, and strong sense of social justice. Those considered to meet these criteria are then encouraged to apply for positions. A two week full induction is provided to each new teacher. The induction includes a focus on the role and development of individual learning plans.</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Program range and student engagement</th>
<th></th>
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</thead>
<tbody>
<tr>
<td>School E</td>
<td>Kids at Play program: A major curriculum approach adopted at School E focuses on changing the culture of interaction between teachers and students, as well as the students’ relationship with the curriculum. The school is using a developmental curriculum centred around relationship building that operates across all year levels within the school. The program developed an approach providing students with regular play sessions in which they could explore and investigate experiences that can assist in developing skills in story writing as well as general communication skills.</td>
</tr>
<tr>
<td>School F</td>
<td>Hands on Learning Program: This program started in 1999 at School F and has since become a philanthropically supported intervention program that has spread into eight other schools. The program consists of four groups of ten students drawn from years 7-10. These multi-aged groupings are withdrawn from classes for one day per week to work on practical construction projects in and around the school</td>
</tr>
</tbody>
</table>
with a teacher and an artisan. The school has two straw bale mud huts built by Hands On teams, and the front of the Junior campus is currently being remodelled by Hands On Learning students. The students obtain direct and incidental mentoring from the teacher and artisan running the groups. Participation is voluntary, and those students in need of much greater support may spend two or even more days per week in Hands On. Reengagement rates are high, with retention rates of participants being above 90% and program attendance rates similarly high. Involvement in Hands On Learning also translates into higher attendance rates in students’ mainstream classes during the days they are not in Hands On. The teams also share resources with Hands On teams at other schools, and visits between these different groups are encouraged.

**School G**

Extended hours on literacy and numeracy with small groups: Most of the schools program is based on literacy and numeracy using what they call a tool box which is a metaphor for a folio or wallet on student progress which has progress point and student needs identified. They have a range of student assessments in addition to AIM results. Students work on the tool box program 9-10.30 and 11 to 1.30 though with a small time for physical education. The school does not use Reading Recovery as it would not allow them to deal with enough of the students who need assistance.

**Parent and community interaction**

**School H**

Particular use of Welfare support in conjunction with ACE centre and parent volunteers: The school is trying to lift the aspirations of the community. Community relations are a major role for the welfare coordinator who also organises recognition of the learning of volunteers through the ACE centre. The school was currently using its new kitchen facility (in conjunction with a garden facility) for coffee making and food handling course for parents. The school has a Community Link program with Rotary. It includes bringing in volunteers including former students into the school, and school students and parent volunteers regularly visiting two nursing homes. The school won a non-curriculum innovation award. The school has a Koorie parent group stimulated by a Koorie parent and has found work placement for some Koorie parents.

### 2.9 Dependence on equity funding

This study confirms that equity funding is often used by schools to support staffing, so that class sizes can be reduced and targeted support for curriculum for the less advantaged expanded. When a school with a high SFO integrates equity funding across the school budget, it has the potential to extend programs and provide tailored assistance to disadvantaged students.

The corollary is that dependence on equity funding is not confined to a particular program for disadvantaged students, but is embedded across the curriculum and support structures of the school. This pattern emerges fairly consistently from responses to the equity survey.

While schools with low SFO can reluctantly conceive of operating without equity funding, those receiving larger allocations suggest that equity funding is crucial to delivering intervention and support programs.
If equity funding was not available, schools report that the staffing implications would result in fewer intervention programs in literacy and numeracy, with schools unable to maintain the staff to student ratios that make these possible. Unable to employ multicultural and other teacher aides, schools indicate an inability to run a range of intervention programs with bigger classes.

We would not be able to provide individual assistance in literacy to at risk students in years 2-6 or provide very small classes where students gain more individual literacy teaching.

In addition to the impact on class sizes and teaching interventions for disadvantaged students and those with learning difficulties, an absence of equity funding would also affect the extent of welfare support in many schools.

Some principals go further, and express the view that, without equity funding, the ongoing viability of the school would be threatened. With some secondary colleges receiving in excess of $1m in equity funds each year, the operation of some schools would clearly be transformed if they were not able to access this funding in some form.

2.10 Regional and central support

In the survey for this project schools were asked to indicate the extent to which they were satisfied with the support in relation to equity they received from the regional and central offices of the Department and from other schools. Most of the schools receiving equity funding answered the question in the survey. Just over 60 per cent were moderately or completely satisfied with regional support and 44 per cent were similarly satisfied with central support and nearly 60 per cent with support from other schools. That left a considerable proportion that were only a little satisfied or were not satisfied.

The Victorian Auditor General (VAG) 2007 conducted a review this year of how central and regional offices were identifying and supporting schools performing below expected levels. In distinction from the current project the VAG review focussed on a limited number of schools, 128 schools which had been underperforming in 1998. It found that improved processes had been implemented to identify schools in need and to measure their progress and that the Department had recognised the need to further improve the capacity of regional offices to support schools, though there was still unmet demand for support. The VAG made several recommendations on identifying schools in need of intervention, on additional strategies for support, on sharing of knowledge of successful interventions, on reviewing regional resources, on reviewing the timeliness of support and on supporting schools to use data better and to monitor progress. The Department while noting the range of initiatives it had undertaken and the achievements to date, supported the VAG’s recommendations.

2.11 What was under emphasised

Departmental guidelines on the use of equity funds note that one of the key strategies for sustained improvement of student outcomes is ongoing evaluation and monitoring of student progress through systematic use of data (e.g. literacy and numeracy outcomes data; student
satisfaction and attendance data, AIM results) to identify students at risk and the use of diagnostic and developmental assessment tools to regularly monitor progress.

While some schools have adopted ongoing monitoring and evaluation and monitoring as a core element of their equity strategies (evident in some case study schools), the perception that there are many others that do not make such continual and active use of the available data is reinforced by the findings from the on-line survey that only 30% of schools receiving MIPs funding use the Students at Risk Mapping Tool.

A second area that was not emphasised in the survey increased liaison with early childhood centres though the issue was mentioned in the case studies. The capacity of schools and early childhood centres to cooperate especially in aspects of schools and parent relationships would seem to be enhanced in the new DEECD structure.

A further issue also raised by Angus et al (2007) was the extent to which vigorous attention to literacy and numeracy was crowding out other aspects of the curriculum, less related to test results but important for student engagement and perhaps for non-cognitive development. This includes the time available for time for music, art and physical development.
References

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DEECD 2007, *Strategies used by schools to improve outcomes for students from disadvantaged backgrounds: A review of the literature*.

DEECD 2007, *The Use of Equity Funding to Improve Outcomes: Data analysis*.


Appendix: Examples of successful strategies

In the survey schools were asked to identify a successful strategy that they have used. This open-ended question achieved a 77 per cent response rate i.e. approximately 355 schools. Examples are reported here relating to programs and professional development.

Programs

The main response to this question was an example of a successful program. The programs reported covered a broad range of areas including academic skills, social and emotional skills, physical, creative and career path skills and community engagement. Most of the programs required the use of additional staff.

The main areas of support were for literacy and numeracy, which also included reading recovery programs, speech pathology, language enhancement, ESL, THRASS, Multilit and Support for Bridges literacy. Other academic programs include science and technology, take home laptop programs and digital technology programs, individually sequenced learning programs and programs for students with disabilities.

The funding has enabled the employment of a leading teacher responsible for Student Well Being. His leadership has resulted in gains in student attendance to be above the State benchmark, a reduction in the severity of the distress caused by student misbehaviour and an increase in the literacy levels of students in need of literacy support either through a Language Disorder, disability or developmental delay. He coordinates a program that we call 'Closing the Gap' that provides intensive literacy support through individualised learning programs for students delivered by trained SSOs in liaison with a Speech Pathologist and the Early Years Literacy Coordinator.

Mathematics Coordination—releasing a class teacher .4 to provide support through Early Years numeracy testing, professional development of other staff, classroom support with maths lessons, team teaching, modelling best practice, classroom observations, assistance with the development of assessment tools and supporting staff with the effective use of assessment.

Social skill development programs mentioned by schools include the ‘You Can Do It’ program, ‘Friends For Life’, mentoring, anger management, student leadership, ‘Rock and Water’ program, ‘Students who Shine’, enhancing relationships in schools programs, high student mobility programs, welfare programs:

The Welfare program developed by the Pupil Welfare Officer (equity funding) has created a model for all staff to better engage students in classroom and school programs leading to improved student learning outcomes. Resilience Building, use of the 4 'foundations' of the You Can Do It program (confidence, persistence, getting along & organisation) is incorporated in all school programs and student relationships. Distinct changes in teacher practise are measurable as a result of a strong emphasis on utilisation of Equity funding.
The Enhancing Relationships in Schools Program—Conflict Resolution and Cultural Diversity Programme where training undertaken by core group of teachers through Melbourne University who came back to the school to train the rest of the teachers. Professional development and curriculum programs have been conducted through the whole school. We have addressed issues in the yard and in classrooms. It has become part of our whole school approach to conflict resolution. In turn there has been an improvement in student perception of student safety and classroom management. Our students are more connected to the school which has helped their learning.

Programs that address physical development incorporate disabilities programs (as mentioned in the academic area), and sporting programs that include swimming, sport in general, aerobics, after schools sports, outdoor education, and walk to school programs.

Swimming Lessons at an Indoor pool 60 kms away—funding pays for the bus travel

The use of support assistants in the area of music and sport. This ensures the low achieving students have a varied and engaged program.

Creative programs encompass the arts, including music, drama, art, and also after school and out-of-school activities.

The school uses equity funding to ensure that all children have access to programs and activities that they might not otherwise use in this community. This increases their level of interest and involvement in school and wins a great deal of community support

Assisting students to attend school camps. All students attended the school camps this year which is a wonderful result.

Keeping class sizes to around 20 students and offering a specialist programs to broaden the educational experience of students

Community engagement programs that are run by the schools and implemented through equity funds include some already mentioned programs such as after school activities and walking to school, and a wide range of community education and interaction including drug education, RISK, CASEA, inclusivity programs such as ‘Tribes’, parent and family support programs, family fun nights, providing breakfasts for students and programs such as ‘It’s Not OK to Be Away’ and homework support.

Multi aged ‘clubs’ program—engaging students in a range of hands-on activities eg cooking/yoga/knitting etc with all staff involved and a focus or developing social skills eg peer tutoring, turn taking eg encouraging parent participation on this program

Any extra money our school gets goes straight back to the students. Our school has 70% E.M.A. There is inequity in nearly every aspect of our students' life. Equity money goes to support student welfare through purchase of school uniform, paying for Breakfast program, etc.
Secondary schools indicated a strong emphasis on pathways for students with programs supported by MIPs funding, including the expansion of VETiS, VCAL and VCE programs, careers programs, student engagement through work experience, ‘SMART Dreams’ program, the Beacon ‘No Dole’ program and the CALM program for disengaging youth, OH&S programs for students going out into the workforce and special interest programs for students working in the community.

Appointment of a MIPs/Pathways/Careers leader who meets with individual students and groups of students to support their post compulsory pathways. She also refers individual 'at risk' students to external support agencies and follows up with students who have left the school to ensure they are engaged in education/training/employment.

Seven Schools in the North Central cluster plus two from outside (East Loddon P-12 and Birchip P-12) pool our MIPS + some equity funding to employ and share 1 MIPS Educator + provide a car. The LLEN through Local Community Partnerships funding employ and share among the schools an additional 2 MIPS/Community Liaison Educators. The 3 Educators are shared by the schools to work on MIPS, Community partnerships, Careers, Work Experience. This is the second year of operation and all schools are utilizing these educators in the schools effectively.

We are re shaping the traditional careers coordinator role. A new position has been created to deal with the administration work.

One staff member (SSO) is employed to deliver/support Speech assistance to students, help coordinate the Oral Language Program (ADOLF) and support it with the THRASS program. Staff are funded to attend Professional Development in ADOLF, THRASS and other Literacy Initiatives (eg. Lit Specialists in the school). Staff and parents from other schools come to see how our program is set up and how it runs. Our staff celebrate the successes.

**Professional development**

Professional development was frequently reported as a successful strategy. Examples included employing a specialist support teacher to provide PD and to develop individual learning programs for students, staff training and coaching, and release time for staff to observe other staff in key learning areas.

Full-time Literacy co-ordinator: higher frequency monitoring of level and whole school student literacy achievement data; constant analysis of the data with targeted strategies outlined and modelled to staff; lead band of trained (on campus) volunteers who assist identified individual students with tailored programs to improve outcomes. Significant leap in P-12 data at end '06.

We have employed literacy and numeracy coaches to lead staff in testing, benchmarking levels and developing strategies for teachers.

Appointment of Middle Years Literacy and Numeracy leaders to work with and coach staff to develop classroom practice leading to improved student learning outcomes.
Release of a staff member to provide Reading Recovery, class support for staff and small group instruction.

POLT Training of a staff member to introduce component mapping by staff to help direct staff professional development. Also to facilitate student surveys in order to improve staff student relationships and assist with identifying ways of improving student engagement through understanding different learning styles.